P B M A

Process Based Mission Assurance

An Introduction to the PBMA Mission Success Knowledge Management System

http:pbma.hq.nasa.gov

Overview Briefing

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What is PBMA?

- **PBMA is an engineering management philosophy**
  - assurance & program control in every phase of a program life-cycle
  - risk behavior in every phase of a program life-cycle
- **PBMA is an innovation in the application of safety, assurance and risk management (assurance) disciplines**
  - reinstalls assurance activity into the systems engineering context
- **PBMA is a systems engineering assurance tool kit**

What is a PBMA Knowledge Management System?

What it Does

- ***Serves as a Mission Success Yardstick***
- ***Assists in Planning***
- ***Assists in Evaluation***
- ***Informs***
- ***Networks/Connects Monitors***
- ***Evaluates***
- ***Documents***
- ***Enables***
- ***Trains***
- ***Educates***
- ***Entertains***

What it Contains

- ***Policies***
- ***Procedures***
- ***Guidelines***
- ***References***
- ***Links***
- ***Examples***
- ***Processes***
- ***Best Practices***
- ***Lessons Learned***
- ***Case Studies***
- ***Tools/Techniques***
- ***Contacts***

Who it Serves

- ***Program Executives***
- ***Program Managers***
- ***Project Managers***
- ***SMA Community***
- ***Independent Assessment Teams***
- ***Systems Management Offices***

The PBMA Framework

Systems Engineering - Mission Success Management

	Formulation			Implementation				
Safety & Mission Success Elements	**1.0 Program Management**	**2.0 Concept Development**	**3.0 Acquisition**	**4.0 Hardware Design**	**5.0 Software Design**	**6.0 Manufac-turing**	**7.0 Pre-Ops Integration & Testing**	**8.0 Operations**
1. Policies -Rules and Guidelines We Need to Follow	**1.1**	**2.1**	**3.1**	**4.1**	**5.1**	**6.1**	**7.1**	**8.1**
2. Planning -Defining and Organizing theThings WeNeed to Do	**1.2**	**2.2**	**3.2**	**4.2**	**5.2**	**6.2**	**7.2**	**8.2**
3. Processes -Doing the Things We Need to Do (Implement the Plans)	**1.3**	**2.3**	**3.3**	**4.3**	**5.3**	**6.3**	**7.3**	**8.3**
4. Program Control -Checks and Balances	**1.4**	**2.4**	**3.4**	**4.4**	**5.4**	**6.4**		**8.4**
5. Verification & Testing	**1.5**			**4.5**	**5.5**	**6.5**		

PBMA Web Site
Modes of Operation

- PBMA Mode
- Program Mode
- Network Mode
- SMA Support Plan Mode

Operational

- Wizard Mode
- Mentoring Mode

In Work

Implementation Schedule

- PBMA Mode / Phase-1 Operability March 2001
- Additional Development & Upgrade
  April 2001 - August 2001
- Formal roll-out September / October 2001

PBMA - On the Grow

Over 100 SMA plans now available - help us Grow

…….contribute

- Electronic copies of Excellent Planning Documents (e.g., Quality Control Plan, Risk Management Plan, etc.)
- Best Practices
- Tools / techniques
- Lessons Learned
- Ideas for Functionality Upgrades

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……..let’s check it out